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CENTRAL FAX CENTER****JUL 03 2008****Amendments to the Claims**

1 - 9 Cancelled

10. [Previously Presented] A method for separating compounds comprising the steps of:
contacting a mixture comprising cell lysate or enzyme and a DNA and/or RNA target compound which includes at least four non-shielded purine or pyrimidine moieties, and other compounds, with a solid composition including immobilized metal ions capable of binding compounds containing a non-shielded purine or pyrimidine moiety, to form a liquid product containing a reduced amount of the DNA or RNA compound which includes at least four a non-shielded purine or pyrimidine moieties; and collecting the target compound substantially free of protein.

11. [Original] The method of claim 10, further comprising the step of: separating the supernatant liquid from the solid composition.

12. [Previously Presented] A method for separating compounds comprising the steps of:
passing a mixture of compounds including target DNA and/or RNA compounds, comprising at least four non-shielded purine moieties, at least four non-shielded pyrimidine moieties or mixture thereof through a column including an IMAC ligand, where the ligand is capable of differentially binding the compounds; and
collecting purified samples of the target DNA and/or RNA compounds.

13. [Original] The method of claim 12, further comprising the step of:
detecting each compound in an effluent from the column as a function of time from at least one detectable property associated with each compound; and
determining the identity of each compound from the detected properties.

14. [Cancelled]

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15. [Cancelled]

16. [Previously Presented] A method for purifying a lysate or enzyme product comprising a crude DNA or RNA target compound containing at least four non-shielded purine and/or pyrimidine base moieties, said method comprising the steps of:

- forming a crude mixture comprising a target compound and contaminants;
- contacting the crude mixture with an agent including an IMAC ligand capable of binding to the target compound to form an IMAC ligand complex;
- separating the complex from the contaminants; and
- recovering the target compound from the complex.

Claims 17-21 are provisionally withdrawn and cancelled to avoid excess fees:

Claims 17-21: Cancelled

22. [Previously Presented] A method according to Claim 35 further comprising the steps of:

separating the supernatant liquid from the solid composition; or further comprising the steps of:

- separating the supernatant liquid from the solid composition and
- eluting the compounds including a non-shielded purine or pyrimidine moiety from the solid composition.

23. [Previously Presented] A method for separating compounds comprising the step of:

- contacting a mixture comprising cell lysate or enzyme and a target compound including DNA, RNA, or both DNA and RNA, a non-shielded purine or pyrimidine moiety and a compound including a shielded purine or pyrimidine moiety with a solid composition including immobilized metal ions capable of binding compounds

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containing a non-shielded purine or pyrimidine moiety to form a supernatant liquid having a reduced amount of compounds including a non-shielded purine or pyrimidine moiety;

wherein the compound including a non-shielded purine or pyrimidine moiety comprises a single stranded nucleic acid oligomer, or a single stranded nucleic acid polymer and the compounds including a shielded purine or pyrimidine moiety comprise double stranded nucleic acid oligomers or double stranded nucleic acid polymers;

wherein the supernatant liquid comprises compounds including DNA and/or RNA, and contains less than or equal to 5% by weight compounds comprising a non-shielded purine or pyrimidine moiety.

24. [Currently Amended] A method of Claim 22 wherein the supernatant liquid comprises compounds including a shielded purine or pyrimidine moiety having less than or equal to 1% by weight of compounds which include a non-shielded purine or pyrimidine moiety.

25. [Previously Presented] A method of Claim 22 wherein the supernatant liquid comprises compounds including a shielded purine or pyrimidine moiety having less than or equal to 0.01% by weight compounds which include a non-shielded purine or pyrimidine moiety.

Claims 26-28 were provisionally withdrawn and cancelled to avoid excess fees:

26 - 28. Cancelled

29. [Previously Presented] A method of Claim 27 23 wherein the mixture of comprises poly(A) tailed mRNA sequences and other mRNA sequences from eukaryotic cells, the poly(a) mRNA sequences elute after the other mRNA sequences; or wherein the mixture